ASTRONOMY & PHYSICS RESEARCH PROGRAMS

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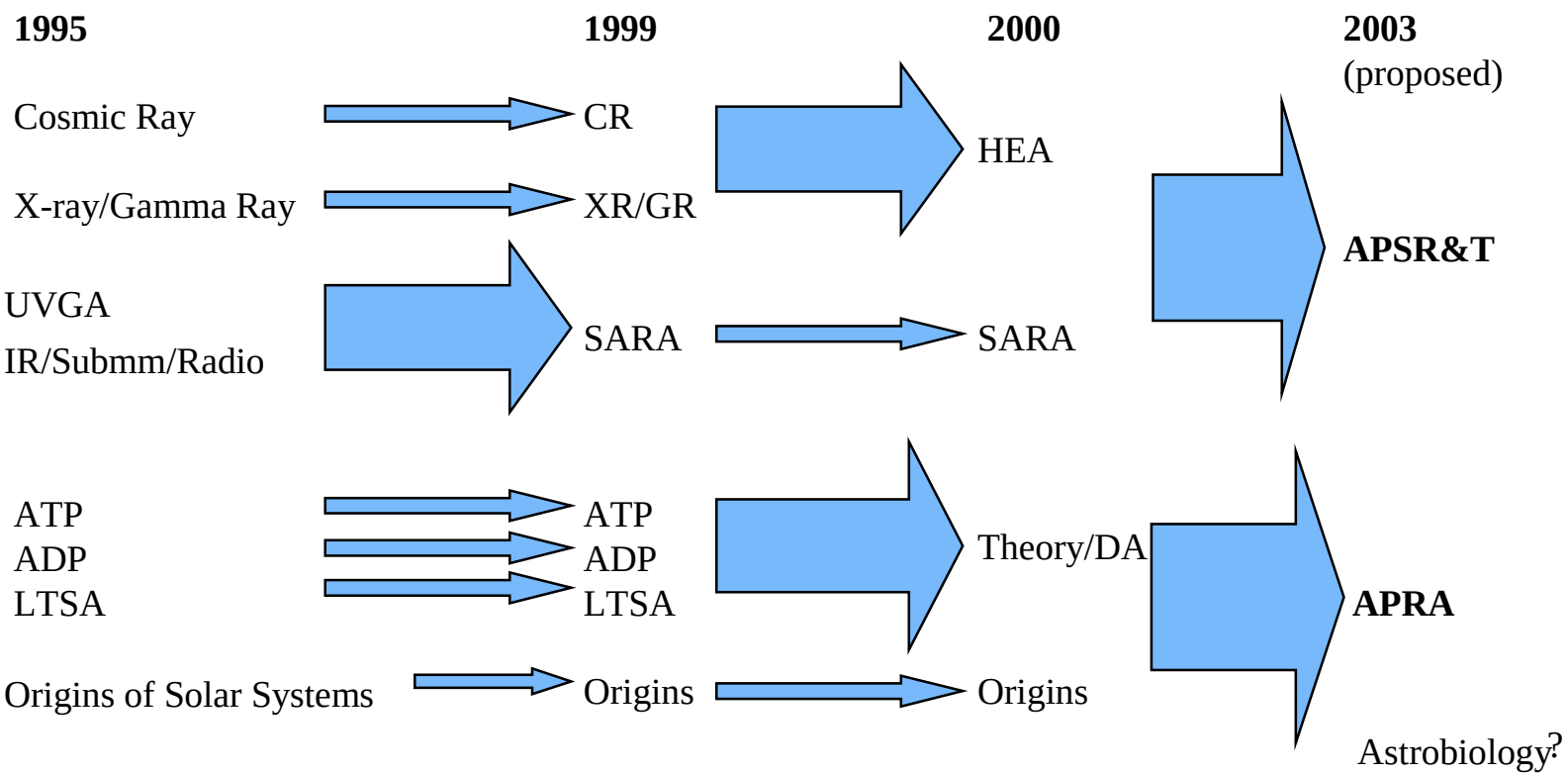
- **Strategic planning for A&P research programs**
- **Proposed re-structuring of A&P research programs in FY03**
- **A&P research programs in ROSS 02**

Strategic Planning for A&P Research Programs

- **Working group set up under AWG**
- **Preliminary Charter**
  - How does the proposed activity relate to the science priorities expressed in the various National Academy survey reports?
  - How does the activity relate to the science goals of the OSS and APD/Origins/SEU/Fundamental Physics?
  - How does the activity relate to specific missions (past, present and future)?
  - Is it required to ensure the success of one or more missions?
  - What investments would most strongly impact the cost and performance, or data analysis and interpretation, of future missions?
- **Supporting workshops/WG**
  - Detector Workshop (Baltimore, June 2000)
  - UV/Optical Detector WG (White Paper in preparation/ Chair: Chris Blades, STScI)
  - IR/submm Detector WG (Chair: Erick Young, Arizona)
  - Fundamental Physics Workshop (February 2002)
  - Legacy of HST Workshop (April 2002)
  - Laboratory Astrophysics Workshop (May 2002)
  - IR/submm science Workshop (March 2002)

Proposed Re-structuring of A&P Research Programs in FY03



A&P Supporting Research & Technology Program

Suborbital

Development and flight of integrated payloads for flight on rockets/balloons

Detectors

Detector development till ~TRL 4

Supporting Technology

Development of components or techniques

Laboratory Astrophysics

Lab data for space astrophysics applications

Ground Based

Limited to FFRDCs

Fundamental Physics

Relativity and gravitational astrophysics….

A&P Research & Analysis

Long Term Space Astrophysics (LTSA)

- Should it be restricted to junior researchers (< 10 yrs. From Ph. D.) only?
- What is the value of the program to senior researchers?
- If senior researchers allowed, should the number of renewals be limited?

Astrophysics Data Program

Evolves with mission needs

Astrophysics Theory Program

Split along scientific disciplines

Origins of Solar Systems

Evolves with ASO needs

Astrobiology

Science addressing ASO needs to be coordinated with SSE Division

A&P Research Programs in ROSS 02

Budget

- Overall budget augmentation of 3%
- "Senior Review" augmentation of $400K each to ATP and "Origins of Solar Systems"
- Budget breakdown
  - SARA $15.9M
  - HEA $16.0M
  - ATP $7.3M
  - ADP/LTSA $16.8M
  - Origins $1.4M

A&P programs solicited in 3 "clusters"

- Astrophysics Theory and Data Analysis
  - –ATP
  - –ADP
  - –LTSA
- Space Astrophysics Research & Analysis (SARA)
- High Energy Astrophysics

"Origins of Solar Systems" program unchanged - included in SSE research programs

New Feature in ADP

Type C: Science Investigations Requiring IT Tool Development Proposals

This Announcement solicits Type C proposals for science investigations requiring the development of information technology tools. The primary emphasis of a proposal of this type must be a science investigation requiring the analysis and interpretation of substantial NASA space astrophysics data that are archived in the public domain at the time of proposal submission. Proposals of this type must require the development of a new data analysis, data mining, data archiving, or other information technology tool that can be applied more generally than the proposed science investigation. Proposals that make use of data archives from one or more NASA astrophysics data centers are encouraged. Proposals to develop tools that substantially duplicate existing tools are not solicited.

New Theory Initiatives

Solicitation for HST Cycle 11 science investigations included a new class of investigations which are purely theoretical in nature.

Solicitation for Chandra Cycle 3 science investigations will also include this new class of investigations